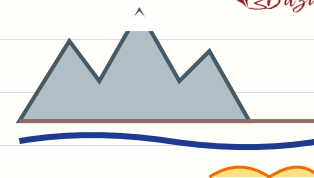


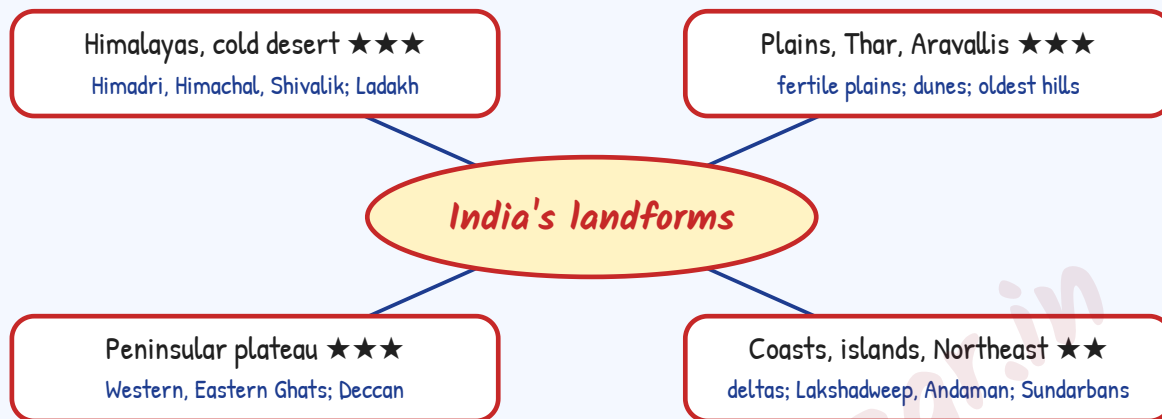
Geographical Diversity of India



a mini-continent

New NCERT Exploring Society: India and Beyond, Grade 7 · 2026-27

Chapter map (★ = important for tests)



What is inside

1. India from space; the subcontinent; five regions; map (p. 2-3)
2. The Himalayas: water tower, formation, three ranges (p. 4-5)
3. Ladakh, the cold desert; the Gangetic Plains (p. 6)
4. The Thar Desert and the Aravalli Hills (p. 7)
5. The Peninsular Plateau (p. 8)
6. Coasts, deltas and the islands (p. 9)
7. Sundarbans and the Northeast; region summary (p. 10)
8. Let's explore answers; all 9 Questions and activities (p. 11-13)
9. Exam-style questions, 3 case studies, practice set of 48 questions, 20 MCQs, 6 A-R, answers (p. 14-18)

★ **Exam tip: Score here:** learn the **five regions** in order (mountains, plains, desert, peninsula, islands) with **one fact, one place and one way of life** for each; the **three Himalayan ranges**; why the south is a **peninsular plateau**; and the difference between the **west and east coasts**.

Big questions: What are some key geographical features of India? How does India's geographical diversity affect our lives?

Definition 📖 **One-line chapter:** from the snowy Himalayas and fertile plains to the Thar Desert, the old plateau, long coasts and far-flung islands, India's varied geography shapes its soils, plants, animals, livelihoods and cultures, and has shaped its civilisation.

Opening quote (Sri Aurobindo): by its very geography India appears quite distinct from other countries, and that itself gives it a certain **national character**. Image: **Jog Falls**, Karnataka, on a plateau; the power of falling water is turned into **hydroelectricity** ("hydro" = water) by turbines.

Ans. India from space: in 1984, Rakesh Sharma, the first Indian astronaut, was asked by Prime Minister Indira Gandhi, "How does India look from space?" He replied, "**Sāre jāhān se achchha**" (better than the whole world), the title of a well-known early-20th-century poem.

India and the subcontinent ★★

Definition 📖 India is the **seventh-largest country** in the world and a part of **Asia**. With its neighbours **Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka and Myanmar**, it forms the **Indian Subcontinent** ("subcontinent" because it is part of the continent of Asia). India gives its name to the subcontinent.

Five regions (for discussion)

1. the great **mountain zone** (Himalayas)
2. the **plains** of the Ganga and the Indus
3. the **desert** region (Thar)
4. the **southern peninsula**
5. the **islands**

Natural boundaries

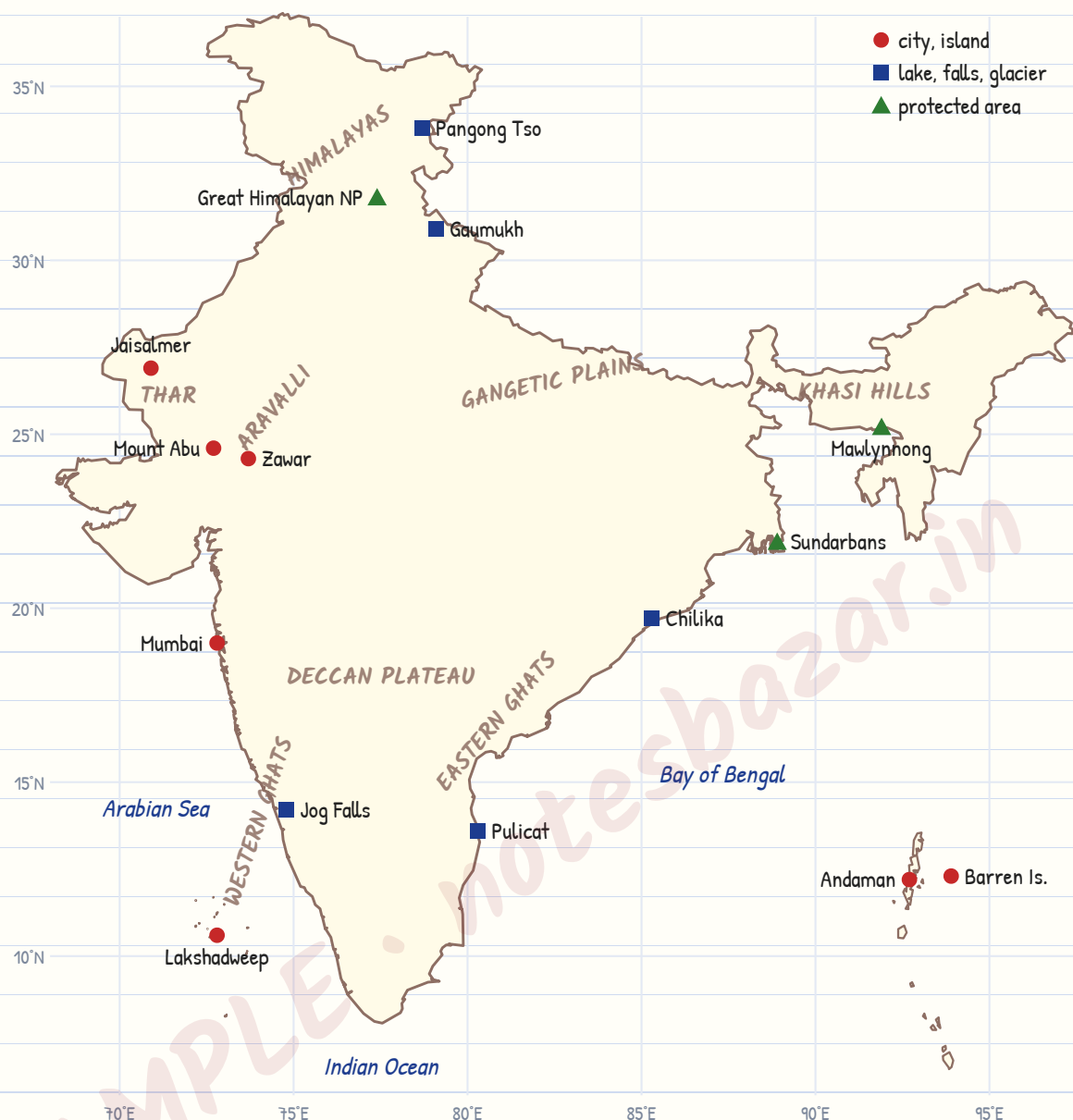
Side	Boundary
north	the Himalayas (a natural barrier)
west	the Thar Desert and the Arabian Sea
south	the Indian Ocean
east	the Bay of Bengal

Ans. These features **separate** India from the rest of the continent and have played a crucial role in shaping India's **climate, culture and history**.

Ans. Let's explore: **latitude and longitude**. India lies roughly between **8°N and 37°N** latitude and **68°E and 97°E** longitude (more exactly 8°4'N to 37°6'N and 68°7'E to 97°25'E). The **Tropic of Cancer** (23.5°N) passes through the middle of the country.

★ **Exam tip:** Reading a physical map: the **legend** shows height by colour: greens for low plains, yellows and browns for plateaus and hills, dark brown, purple and white for high mountains; blue for water. Keep the map at the end of the textbook open as you read.

A bird's-eye view: map of the features in this chapter ★★★



Physical features in this chapter (outline simplified; positions approximate, not to scale)

★ **Exam tip: Map trick:** go round the map like the chapter:
north (Himalayas, Ladakh, Gaumukh) → **plains** → **west** (Thar, Jaisalmer, Aravallis, Mount Abu) → **south** (plateau, Ghats, Jog Falls) → **coasts** (Mumbai, Chilika, Pulicat) → **islands** (Lakshadweep, Andaman, Barren) → **east** (Sundarbans) → **Northeast** (Khasi hills, Mawlynnong).

X **Don't do this: Common map mistakes:** placing Lakshadweep in the Bay of Bengal (it is in the **Arabian Sea**); putting the Aravallis east of Delhi (they run **southwest from Delhi** through Haryana, Rajasthan to Gujarat); calling Chilika a river (it is a **lagoon** in Odisha).

Feature	State / UT	Feature	State / UT
Pangong Tso	Ladakh	Jog Falls	Karnataka
Gaumukh (Gangotri Glacier)	Uttarakhand	Chilika Lake	Odisha
Great Himalayan National Park	Himachal Pradesh	Pulicat Lake	Andhra Pradesh, Tamil Nadu
Jaisalmer, Mount Abu, Zawar	Rajasthan	Sundarbans	West Bengal
Mumbai	Maharashtra	Mawlynnong, Khasi hills	Meghalaya
Lakshadweep	UT, Arabian Sea	Andaman, Barren Island	UT, Bay of Bengal

The Himalayas ★★★

Definition 📖 The Himalayan range is like a **massive wall**, about **2500 km** long. Many peaks are over **8000 m** high (the "**Eight Thousanders**"). It stretches across **six countries**: **India, Nepal, Bhutan, China, Pakistan and Afghanistan**. The highest mountain in the world, **Mount Everest** (8849 m), is here.

Ans. Water Tower of Asia: in summer, melting snow feeds major rivers such as the **Ganga, Indus and Brahmaputra**. These rivers and their tributaries give water for **drinking, farming and industry** to **hundreds of millions** of people.

Ans. Sacred mountains: the Himalayas are important to many cultures and belief systems; **temples and monasteries** built there attract monks and spiritual seekers from around the world.

Don't miss out: **Gaumukh** ("Cow's Mouth"), Uttarakhand, at the edge of the **Gangotri Glacier** (one of the largest in the Indian Himalayas), is where the **Bhagirathi**, a major tributary of the Ganga, begins. It is sacred, attracts pilgrims and is a popular trekking destination.

How the Himalayas were formed ★★★

Definition 📖 Long ago India was part of a bigger landmass, **Gondwana**, with **Africa** as its neighbour. It broke away and moved **north**. About **50 million years ago** it **collided** with **Eurasia**; the land between them **crumpled and rose**, like a carpet wrinkling when pushed. These **folded layers** of rock became the Himalayas.

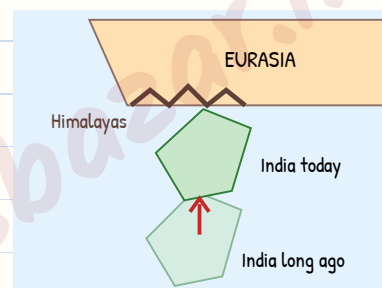
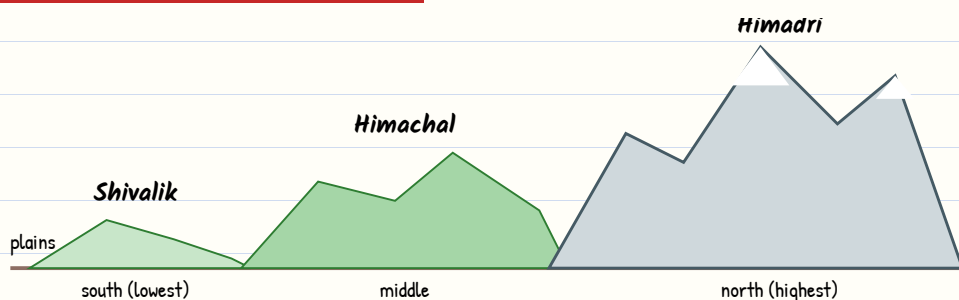


Fig. 1.4: India's journey to Eurasia (sketch)

Ans. India is **still pushing** into Asia at about **5 cm a year** (slower than your hair grows), so the Himalayas still rise about **5 mm a year**, which adds up to **5 m in a millennium**.

Don't miss out: "**Himalaya**" = Sanskrit **hima** (snow) + **ālaya** (abode, dwelling): the "**abode of snow**".

The three main ranges ★★★



The Himalayas from south to north (schematic, not to scale)

Range	Also called	Features	Life and places
Himadri	Greater Himalayas	highest, most rugged; peaks like Everest, Kanchenjunga; snow all year	life is tough; few settlements
Himachal	Lower Himalayas	south of the Himadri; moderate climate	rich biodiversity; hill stations Nainital, Mussoorie (Uttarakhand), Darjeeling (West Bengal), Shimla (Himachal Pradesh)
Shivalik	Outer Himalayas	outermost and lowest; rolling hills, dense forests	rich in wildlife; transition to the Gangetic (Northern) Plains

Ans. Let's explore: Himalayan states and UTs: Jammu and Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, and the hill areas of West Bengal (Darjeeling); the Northeastern hill states lie on its eastern side.

Kath-kuni (dhajji-dewari) houses: the traditional style of the western Himalayas; locally available stone and wood keep the house warm and help it resist mild earthquakes.

Great Himalayan National Park, Himachal Pradesh: a UNESCO World Heritage Site with rich flora and fauna (Himalayan monal, snow leopard, rhododendron), preserved by the government and the village communities living inside it.

X Don't do this: Common mistake: "Himachal" here is a range (the Lower Himalayas), not only the state Himachal Pradesh. And the Shivaliks are the lowest, not the highest.

The cold desert of India ★★

Definition 📖 Ladakh is a cold desert: winter temperatures drop below -30°C ; very little rainfall; rugged, rocky terrain, deep valleys and lakes like Pangong Tso (*tso* = lake), whose water is salty (minerals dissolve from the surrounding mountains).

Ans. Moonland: the terrain looks like the Moon's. The mountains were folded in the collision; this part was once ocean, so the rocks are mostly sand and clay, which wind and rain eroded into strange shapes.

Ans. Life in Ladakh: wildlife like snow leopards, ibex, Tibetan antelopes; yaks reared for milk, meat, wool and dung, and for transport; ancient monasteries and festivals like Losar and the Hemis Festival; a simple way of life.

★ **Exam tip:** A desert is about rain, not heat: Ladakh is a desert because it gets very little rainfall, even though it is freezing cold.

The Gangetic Plains ★★★

Definition 📖 South of the Himalayas lie the vast, fertile Gangetic Plains (Northern Plains), important in India's history and civilisation. Rivers from the Himalayas (the Ganga, Indus and Brahmaputra systems and their tributaries) bring water and minerals that enrich the soil, so the region is highly fertile and ideal for agriculture (multi-cropping, paddy fields). Rivers also generate electricity.

Ans. People and transport: a large proportion of India's population lives here. The flat land allowed an elaborate road and railway network; rivers have been used for travel and trade for millennia. Wildlife: grey langur, tiger (Project Tiger), gharial (2.5–4.5 m, nearly extinct, protected by law), peacock (national bird).

Let's explore. Brahmaputra ("son of Brahma", one of few rivers not named after a goddess) grows in summer because snow and glaciers melt in the Himalayas, and then the monsoon adds heavy rain. Lights at night are concentrated in the plains because many people live there in dense villages, towns and big cities on easy, flat land.

The Great Indian Desert (Thar) ★★★

Definition 📖 The **Thar** is a vast **arid** region of golden **sand dunes**, rugged terrain and open sky. Most of it is in India, across **Rajasthan, Gujarat, Punjab and Haryana**. It is a **natural barrier**: very hot days, cold nights and lack of water deter movement.



a sand dune (side view)

Ans. Sand dunes: the **wind** shifts and shapes sand into hill-like forms, sometimes up to **150 m** high. **Let's explore:** dunes keep a similar shape because the wind usually blows from one direction: a gentle slope faces the wind and a steep slope lies on the sheltered side; the dune slowly moves as sand is blown over the top.

Ans. Life in the Thar: food habits, clothing and lifestyle suit the harsh conditions. **Jaisalmer**, the "**Golden City**", has a fort that is a **UNESCO World Heritage site**; the **Pushkar Mela** (camel fair) is held at the desert's edge.

Don't miss out: water in the desert. Women often walk **long distances** to fetch water. Utensils are **scoured with sand** and lightly rinsed; the rinse water is **reused** (e.g. for a plant). Rajasthan is famous for ingenious water conservation: **taanka** or **kunds**, structures that **store rainwater**, often for drinking. So don't leave the tap running!

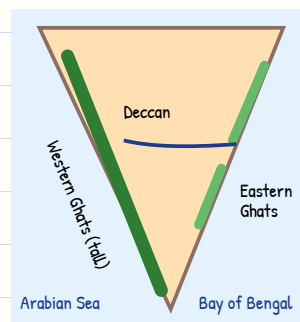
The Aravalli Hills ★★★

Definition 📖 Among the **oldest mountains in the world**, about **2.5 billion years** old. Highest peak **Mount Abu** (over 1700 m); most hills are 300–900 m. A 4½-hour drive takes you from Mount Abu to **Jodhpur** in the Thar: a completely different geography. States: **Delhi, Haryana, Rajasthan, Gujarat**.

Ans. Importance: a **natural barrier** that stops the Thar from spreading **east**; rich in **marble, granite, zinc, copper**; ancient mines at **Zawar** show that, over eight centuries ago, Indians were the **first in the world to master zinc extraction**; forts like **Chittorgarh, Kumbhalgarh, Ranthambore** used the hills as a defence.

The Peninsular Plateau ★★★

Definition 📌 **Plateau:** a landform that rises above the surrounding land, with a **more or less flat top** and often **steep sides**. **Peninsula:** land surrounded by water on **three sides**. India's most important plateau is the **triangular** area in the middle and south, a **very old** formation, surrounded by the **Arabian Sea, Bay of Bengal and Indian Ocean**: so it is a **peninsular plateau**.



the peninsular triangle (schematic)

	Western Ghats	Eastern Ghats
height	taller ; continuous, like a wall along the west coast	lower ; broken into smaller hills
notes	many waterfalls in the monsoon; UNESCO World Heritage Site ; northern part = Sahyadri ; rich biodiversity (lion-tailed macaque, king cobra, insect-eating plants)	along the east coast; wide plains between them and the sea

Definition 📌 **Deccan Plateau:** the vast flat highland between the two Ghats. The plateau **tilts slightly east**, so **east-flowing** rivers (**Godavari, Krishna, Kaveri, Mahanadi**) drain into the **Bay of Bengal**; the **west-flowing** **Narmada and Tapi** drain into the **Arabian Sea**. They give water for farming, industry and **hydroelectric power**.

Ans. Riches: minerals (e.g. **coal**, important for electricity, though burning it adds to **global warming**), forests and fertile land: vital for India's economy. Many **waterfalls** (rivers over uneven rock) attract tourists, give hydropower and irrigation (e.g. Powerhouse Falls near Munnar).

Ans. Tribal communities in the plateau forests: **Santhal, Gond, Baiga, Bhil, Korku**, with their own languages, traditions and ways of life close to Nature; spread over Jharkhand, West Bengal, Odisha, Assam, Madhya Pradesh, Chhattisgarh, Maharashtra, Telangana and Gujarat.

India's amazing coastlines ★★★

Ans. The Indian coastline is over **7500 km** long: beaches with golden sand or black rocks, cliffs, forests, coral reefs, jungle-covered islands. **Mumbai**, on the west coast, is India's **financial centre**.

	West Coast	East Coast
extent	Gujarat to Kerala (via Maharashtra, Goa, Karnataka)	Ganga delta to Kanyakumari , between the Eastern Ghats and the Bay of Bengal
width	narrow ; the Western Ghats are close to the sea	wide plains
rivers	short, swift rivers from the Western Ghats form estuaries (largest: Narmada, Tapti); coves and creeks	big rivers form deltas : Mahanadi, Godavari, Krishna, Kaveri
other	many ports and cities , centres of trade for millennia	Chilika Lake and Pulicat Lake (lagoons)

Definition 📖 **Delta**: a landform at a river's mouth where it **deposits sediments** into a larger body of water; over time a **triangular or fan-shaped**, very **fertile** area forms. Near the coast the river splits into many streams called **distributaries** (Let's explore).

Definition 📖 **Lagoon**: a body of water separated from a larger body of water by a **natural barrier** (e.g. a sandbar).
Estuary: a river mouth where fresh water meets the sea without building a delta.

Ans. Let's explore: five rivers into the Bay of Bengal: Ganga, Brahmaputra, Mahanadi, Godavari, Krishna (also Kaveri). **Coastal states**: Gujarat, Maharashtra, Goa, Karnataka, Kerala (west); Tamil Nadu, Andhra Pradesh, Odisha, West Bengal (east).

Indian islands ★★★

	Lakshadweep	Andaman and Nicobar
sea	Arabian Sea , near the Malabar coast of Kerala	Bay of Bengal
made of	36 islands of coral (an archipelago); not all inhabited	more than 500 large and small volcanic islands in two groups
importance	India controls a vast marine area : fishing, resource exploration, environmental protection	"outposts of India" watching the ocean (naval dock); rich flora and fauna; Cellular Jail ; Barren Island , India's only active volcano

Ans. The islands have unique wildlife, beaches, coral reefs and volcanoes; several **ancient tribes** made them home **tens of thousands of years ago**. In the **Cellular Jail**, many freedom fighters were jailed in severe conditions; it is preserved to remind us of their sacrifices.

The Sundarbans ★★

Definition 🌿 In the **delta of the Ganga and Brahmaputra** and their tributaries (West Bengal): a unique mix of **river, sea and land** with **mangroves**. About **half is in India**, the rest in **Bangladesh**. A **UNESCO Heritage site**, home of the **Royal Bengal Tiger**.

The hills of the Northeast ★★

Definition 🌿 The **Garo, Khasi and Jaintia hills**, part of the **Meghalaya Plateau**: lush greenery, **one of the highest rainfalls in the world**, waterfalls (Seven Sisters Falls), forests, wildlife, fertile land. The Khasi celebrate **Shad Suk Mynsiem** as gratitude to Nature.

Don't miss out: **Mawlynnong**, East Khasi Hills, Meghalaya, the "**cleanest village in Asia**": bamboo dustbins, eco-friendly living, and **living root bridges** made by weaving tree roots over many years (also near Nongriat, Cherrapunjee).

All five regions at a glance ★★★

Region	Key fact	Place	Life
Himalayas	young fold mountains, 2500 km; water tower	Gaumukh, GHNP	kath-kuni houses, monasteries, yaks
cold desert	below -30°C, little rain	Ladakh, Pangong Tso	Losar, Hemis Festival
Gangetic Plains	fertile river soil, flat	Delhi, UP, West Bengal	farming, dense population, rail and road
Thar and Aravallis	arid dunes; oldest hills (2.5 bn yrs)	Jaisalmer, Mount Abu, Zawar	taanka, sand-scrubbing, forts
Peninsular Plateau	old triangular plateau, two Ghats	Deccan, Jog Falls	tribes, minerals, hydropower
coasts and islands	7500 km; deltas vs estuaries; coral and volcanic islands	Mumbai, Chilika, Lakshadweep, Andaman	ports, fishing, navy
Northeast, Sundarbans	very heavy rain; mangrove delta	Khasi hills, Mawlynnong	root bridges, Bengal tiger

Before we move on: India gives its name to the subcontinent; it has diverse features from the snowy Himalayas to the hot Thar; plains watered by many rivers; a peninsular plateau between the Arabian Sea and the Bay of Bengal. These create a variety of **soils, flora, fauna, livelihoods and economic opportunities**, have honed a **rich culture** and have shaped our **civilisation**.

Questions and activities: our answers

1. Two important geographical features of India, and why.

Ans. The Himalayas: a wall that blocks icy winds from Central Asia and keeps the north warmer in winter; it stops the monsoon winds so they shed rain over India; its glaciers feed the Ganga, Indus and Brahmaputra, which flow all year (the "Water Tower of Asia"); forests, wildlife, sacred places; a natural barrier.

Ans. The Gangetic Plains: rivers spread fertile soil over a huge flat area, making it India's food bowl; flat land and rivers made farming, transport, trade and towns easy, so a large share of India's people live here and it was central to our history and civilisation.

(Other good choices: the long coastline, the Peninsular Plateau, the Thar Desert.)

2. What might India look like without the Himalayas?

Ans.

- Freezing winds from Central Asia would sweep into north India in winter.
- The monsoon winds would pass on northwards, so much less rain would fall; large areas could be dry.
- No glaciers to feed the Ganga, Indus and Brahmaputra: rivers would be smaller and might dry up in summer; the fertile plains would not have formed.
- No natural northern barrier; no Himalayan forests, wildlife, hill stations or sacred places.

North India would probably be colder in winter and much drier, with less farming and fewer people. (A sketch: a flat, brown north with thin rivers and cold winds blowing in.)

3. Why is India called a "mini-continent"?

Ans. Like a continent, India has almost every kind of landform and climate in one country: the snowy Himalayas, the vast fertile plains, the Thar Desert, the cold desert of Ladakh, the old Peninsular Plateau, long coasts and island groups; climates from icy (Ladakh) to hot and wet (Kerala, Meghalaya) and hot and dry (Rajasthan). It has huge variety of plants, animals, peoples, languages and cultures, and it is set apart from the rest of Asia by the Himalayas and seas, forming its own subcontinent.

4. Follow a big river from source to sea; how do people use it?

Ans. The **Ganga** begins as the Bhagirathi at **Gaumukh (Gangotri Glacier)**, Uttarakhand, and flows through Uttarakhand, Uttar Pradesh, Bihar and West Bengal into the **Bay of Bengal**, forming the **Sundarbans** delta.

Stretch	Uses
mountains (Gangotri to Haridwar)	pilgrimage (Gangotri, Rishikesh, Haridwar), rafting and tourism, hydroelectric power
plains (Kanpur, Prayagraj, Varanasi, Patna)	irrigation canals, drinking water for cities, fishing, festivals and bathing (Kumbh Mela), industries
lower plains and delta (Kolkata, Sundarbans)	inland waterways and ports , fishing, farming on fertile delta soil, mangrove forests and wildlife

Discuss too how we must keep the river clean (e.g. the Namami Gange programme).

5. Why is southern India called a peninsular plateau?

Ans. It is a **plateau**: a large area of high, fairly **flat land** of very **old, hard rocks**, higher than the land around, with steep edges (the Ghats). It is **peninsular**: surrounded by water on **three sides**, the **Arabian Sea** (west), **Bay of Bengal** (east) and **Indian Ocean** (south). Hence, the **Peninsular Plateau** (the Deccan Plateau forms most of it), bordered by the Western and Eastern Ghats.

6. A UNESCO Heritage Site that interests you.

Ans. The **Sundarbans** (West Bengal, shared with Bangladesh) is a huge **mangrove forest** in the delta of the Ganga and Brahmaputra. Its trees grow in **salty water** and have special **breathing roots** sticking out of the mud. It is the home of the **Royal Bengal Tiger**, which swims between islands, as well as crocodiles and many birds. The forest **protects the coast** from cyclones and floods. Most interesting to me: the land and water change with the **tides twice a day**.

(Other sites in this chapter: the Western Ghats, the Great Himalayan National Park, Jaisalmer Fort.)

7. Describe your place by a physical feature.

Ans. Example: I live in **Lucknow, Uttar Pradesh**. It lies in the **Gangetic Plains**, on the Gomti, a tributary of the Ganga, between the Himalayas to the north and the Peninsular Plateau to the south. (Others: **Pune**: on the Deccan Plateau, east of the Western Ghats; **Chennai**: on the eastern coastal plain by the Bay of Bengal; **Jodhpur**: in the Thar Desert, west of the Aravallis; **Shimla**: in the Himachal range.)

8. Food preservation across India (class project).

Region	Method	Why it suits the region
Rajasthan	sun-drying vegetables like ker-sangri; papad, badi	hot, dry, sunny; fresh vegetables are scarce
Ladakh, Himachal	drying apricots and vegetables; cool stone store-rooms; dried cheese (churpi)	short growing season; long, cold winters
coasts (Konkan, Kerala, Bengal)	salting and drying fish	plenty of fish and salt; sunny days
Northeast	fermenting bamboo shoots; smoking meat over the kitchen fire	humid climate; plenty of bamboo
all over India	pickles in oil, salt, spices; jams and murabbas; ghee	keep seasonal produce for months

9. How has geography helped unite India?

Ans.

- **Natural boundaries:** the Himalayas and the seas on three sides give India a distinct shape, so people long saw the land as one (Bhārata).
- **Rivers connect regions:** the Ganga, Narmada, Godavari flow across many states; people share them, travel on them and honour them as sacred.
- **The monsoon:** almost all of India depends on it, so harvest festivals (Makar Sankranti, Pongal, Lohri, Bihu) fall around the same time.
- **Pilgrimage:** holy places in the mountains (Badrinath, Kedarnath), on the coasts (Puri, Rameswaram, Dwarka) and plains (Varanasi) bring people from every corner together.
- **Exchange:** regions grow different things (tea, spices, wheat, cotton), so trade has linked them for thousands of years.

★ **Exam tip:** Toolkit for map questions: name the **feature** (mountain, river, plateau, coast), the **direction** from it, and one **landmark**. E.g. "Jaisalmer: in the Thar Desert, western Rajasthan, west of the Aravallis."

Exam-style questions *Exam-style*

1. Name the countries of the Indian Subcontinent. [1]
Ans. India, Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka, Myanmar.
2. Why are the Himalayas called the Water Tower of Asia? [1]
Ans. Melting snow feeds the Ganga, Indus, Brahmaputra.
3. How were the Himalayas formed? [2]
Ans. India (from Gondwana) collided with Eurasia ~50 million years ago; land crumpled and rose.
4. Why is Ladakh called a cold desert? [2]
Ans. Below -30°C in winter and very little rain.
5. Give two reasons why the Gangetic Plains are densely populated. [2]
Ans. Fertile soil and water for farming; flat land for transport and towns.
6. Distinguish the three Himalayan ranges. [3]
Ans. Himadri highest, snow; Himachal moderate, hill stations; Shivalik lowest, forests.
7. Compare the west and east coasts. [3]
Ans. Narrow, estuaries vs wide, deltas; Gujarat-Kerala vs Ganga delta-Kanyakumari.
8. Describe the Thar Desert and the Aravallis and explain how people live with the conditions. [5]
Ans. Arid dunes, natural barrier; water scarcity, taanka, sand-scrubbing; Aravallis oldest, stop the desert, minerals, Zawar zinc, forts.

Case study 1: the moving plate Exam-style. "India is still pushing into Asia at about 5 cm a year, and the Himalayas rise about 5 mm a year."

- (i) Which landmass did India break from? **Gondwana**. [1]
- (ii) How much will the Himalayas rise in 1000 years? **About 5 m**. [1]
- (iii) What do folded rock layers show? **The land crumpled in the collision**. [1]
- (iv) Why does Ladakh have rocks of sand and clay? **It was once part of an ocean**. [2]

Case study 2: a tap left running Exam-style. In a Thar village, women walk far for water, scour pots with sand and store rain in a taanka.

- (i) Which state is most of the Thar in? **Rajasthan**. [1]
- (ii) What is a taanka? **A structure that stores rainwater**. [1]
- (iii) Why scrub with sand? **To save scarce water**. [1]
- (iv) Give two ways you can save water at home. **Close taps, reuse rinse water, collect rainwater**. [2]

Practice set: test yourself *Exam-style*

Try every question before looking at the answers on page 18. 40 or more out of 48 means you are ready for the test.

A. Fill in the blanks (1 mark each)

1. India is the _____-largest country in the world.
2. The Himalayan range is about _____ km long.
3. The Bhagirathi begins at _____.
4. The highest Himalayan range is the _____.
5. Pangong Tso has _____ water.
6. The highest peak of the Aravallis is _____.
7. The northern Western Ghats are called the _____ Hills.
8. India's only active volcano is on _____ Island.

B. True or false? (1 mark each)

1. The Shivaliks are the outermost Himalayan range.
2. Lakshadweep is in the Bay of Bengal.
3. The Aravallis are about 2.5 billion years old.
4. The Narmada flows into the Bay of Bengal.
5. The East Coast has wide plains and deltas.
6. All Lakshadweep islands are inhabited.
7. About half the Sundarbans is in India.
8. Mawlynnong is in Assam.

C. Very short answer (1 mark each)

1. Who was the first Indian astronaut?
2. Meaning of "Himalaya"?
3. Name a hill station in the Himachal range.
4. Name two festivals of Ladakh.
5. Which city is the "Golden City"?
6. Where were the ancient zinc mines?
7. Name two tribes of the plateau.
8. Length of India's coastline?
9. Name a lagoon on the east coast.
10. Which jail in the Andamans held freedom fighters?

D. Short answer I (2 marks each)

1. What is a peninsula? Give India's example.
2. What are kath-kuni houses?
3. Why does the Brahmaputra swell in summer?
4. What is a delta?
5. How do the Aravallis help north-western India?
6. Why are the Andaman islands called outposts of India?
7. How are sand dunes formed?
8. What makes Mawlynnong special?

E. Short answer II (3 marks each)

1. Describe the natural boundaries of India.
2. Describe the Ladakh landscape and its life.
3. Compare the Western and Eastern Ghats.
4. Why do most Deccan rivers flow east? Name two exceptions.
5. Compare Lakshadweep with the Andaman and Nicobar Islands.
6. Describe the hills of the Northeast.

F. Long answer (5 marks each)

1. "The Himalayas shape life in India." Explain with five points.
2. Describe the Gangetic Plains and their importance.
3. Describe the Peninsular Plateau: shape, ranges, rivers, resources and people.
4. "India's geography both divides and unites it." Discuss.

G. Challenge (HOTS) questions

1. Why are there few settlements in the Himadri but many in the Himachal range?
2. Why might the west coast have many waterfalls in the monsoon but few big deltas?
3. Why do people in Ladakh and the Thar both value water greatly, though one is cold and one is hot?
4. If the Aravallis were removed, what might happen to Delhi and Haryana?

Case study 3: a trip from Mount Abu Exam-style. Riya drives about 4½ hours from Mount Abu to Jodhpur and sees green hills give way to sand.

- (i) Which range is Mount Abu in? [1] (ii) Which desert is Jodhpur in? [1] (iii) Why does the landscape change so fast? [1] (iv) Name two minerals of the range and one historic fort. [2]

My score (fill in after checking the answers)

Section	A /8	B /8	C /10	D /16	E /18	F /20	G (bonus)	Total /80
My marks								

Rough work

20 MCQs

1. India's natural barrier in the north
(a) the Thar (b) the Aravallis (c) the Himalayas (d) the Ghats
 2. The Himalayas stretch across
(a) six countries (b) three countries (c) one country (d) ten countries
 3. The highest Himalayan range
(a) Shivalik (b) Himachal (c) Aravalli (d) Himadri
 4. Nainital and Shimla are in the
(a) Himadri (b) Himachal (c) Thar (d) Shivalik
 5. The Himalayas formed when India collided with
(a) Africa (b) Eurasia (c) Australia (d) Antarctica
 6. Ladakh is
(a) a hot desert (b) a plateau (c) a delta (d) a cold desert
 7. "Tso" in Ladakhi means
(a) lake (b) river (c) mountain (d) desert
 8. The Gangetic Plains are fertile because of
(a) volcanoes (b) wind (c) river-borne minerals (d) coral
 9. The Thar lies mostly in
(a) Assam (b) Kerala (c) Odisha (d) Rajasthan
 10. Taanka is used to
(a) grind grain (b) store rainwater (c) make pots (d) dry fish
 11. The world's first zinc extraction took place at
(a) Jaisalmer (b) Jodhpur (c) Zawar (d) Shimla
 12. The Aravallis stop the Thar from spreading
(a) east (b) south (c) north (d) west
 13. A river flowing west into the Arabian Sea
(a) Godavari (b) Narmada (c) Krishna (d) Mahanadi
 14. The Western Ghats are
(a) low and broken (b) a desert (c) taller and continuous (d) islands
 15. The west coast's swift rivers form
(a) deltas (b) lagoons (c) dunes (d) estuaries
 16. Chilika and Pulicat are
(a) lagoons (b) dunes (c) islands (d) glaciers
 17. Lakshadweep islands are made of
(a) coral (b) volcanic rock (c) sand dunes (d) ice
 18. India's only active volcano
(a) Mount Abu (b) Pangong (c) Kanchenjunga (d) Barren Island
 19. The Sundarbans are famous for the
(a) snow leopard (b) Royal Bengal Tiger (c) yak (d) camel
 20. Living root bridges are found in
(a) Rajasthan (b) Ladakh (c) Meghalaya (d) Goa
- 1 (c) · 2 (a) · 3 (d) · 4 (b) · 5 (b) · 6 (d) · 7 (a) · 8 (c) · 9 (d) · 10 (b) · 11 (c) · 12 (a) · 13 (b) · 14 (c) · 15 (d) · 16 (a) · 17 (a) · 18 (d) · 19 (b) · 20 (c)

Assertion-Reason (6)

(a) Both true, R explains A. (b) Both true, R does not explain A. (c) A true, R false. (d) A false, R true.

1. A: The Himalayas are still rising. R: India is still pushing into Asia.
2. A: Ladakh gets heavy rainfall. R: Ladakh is a cold desert.
3. A: The east coast has big deltas. R: Large rivers like the Godavari and Krishna deposit sediments there.
4. A: The Gangetic Plains have dense road and rail networks. R: The land is flat.
5. A: Jaisalmer Fort is a UNESCO World Heritage site. R: Barren Island is India's only active volcano.
6. A: The Shivaliks are the highest Himalayan range. R: The Shivaliks are a transition zone to the plains.

Key: 1 (a) · 2 (d) · 3 (a) · 4 (a) · 5 (b) · 6 (d)

Answers to the practice set

- A.** 1. seventh 2. 2500 3. Gaumukh (Gangotri Glacier) 4. Himadri 5. salty 6. Mount Abu 7. Sahyadri 8. Barren
- B.** 1. T 2. F (Arabian Sea) 3. T 4. F (Arabian Sea) 5. T 6. F 7. T 8. F (Meghalaya)
- C.** 1. Rakesh Sharma 2. abode of snow 3. Shimla (or Nainital, Mussoorie, Darjeeling) 4. Losar, Hemis Festival 5. Jaisalmer 6. Zavar (Aravallis) 7. Santhal, Gond (Baiga, Bhil, Korku) 8. over 7500 km 9. Chilika (or Pulicat) 10. Cellular Jail
- D.** 1. land with water on three sides; the southern plateau between the Arabian Sea, Bay of Bengal, Indian Ocean
2. western Himalayan houses of stone and wood; warm, resist mild earthquakes
3. Himalayan snow and glaciers melt (then monsoon rain)
4. fan or triangle of river sediment at a river's mouth
5. block the Thar from spreading east; minerals; climate
6. they keep watch over the ocean (naval base); strategic location
7. wind shifts sand into hill-like shapes, up to 150 m
8. "cleanest village in Asia"; bamboo dustbins; living root bridges
- E.** 1. Himalayas north; Thar and Arabian Sea west; Indian Ocean south; Bay of Bengal east
2. below -30°C , little rain, moonland, salty Pangong Tso; snow leopard, ibex, yaks; monasteries, Losar, Hemis
3. Western taller, continuous, waterfalls, UNESCO, Sahyadri; Eastern lower, broken
4. the plateau tilts east; Narmada and Tapi flow west
5. coral, 36 islands, Arabian Sea vs 500+ volcanic, Bay of Bengal, navy, Cellular Jail, Barren Island
6. Garo, Khasi, Jaintia (Meghalaya Plateau); very heavy rain, forests, waterfalls, root bridges
- F.** 1. barrier against cold winds; monsoon rain; glacier-fed rivers; forests, wildlife, hill stations; sacred places; protection
2. Himalayan rivers bring water and minerals; fertile, farming, dense population, rail and road, trade, history
3. triangle, old; Western and Eastern Ghats, Deccan; east- and west-flowing rivers; minerals, forests, waterfalls; tribes
4. divides: mountains, desert, varied climates and ways of life; unites: natural boundaries, rivers, monsoon, pilgrimage, trade
- G.** 1. Himadri: very high, snow all year, rugged; Himachal: moderate climate, gentler slopes 2. Ghats close to the sea: short, steep, swift rivers fall over cliffs and reach the sea quickly without spreading sediment 3. both get very little rain, so water is scarce 4. desert sand could spread east, making the land drier and hotter
- Case study 3.** (i) the Aravallis (ii) the Thar (iii) the Aravallis are a barrier; beyond them the desert begins (iv) marble, granite (zinc, copper); Kumbhalgarh (Chittorgarh, Ranthambore)

Last-night summary

- India: 7th largest; subcontinent with Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka, Myanmar; boundaries: Himalayas, Thar and Arabian Sea, Indian Ocean, Bay of Bengal.
- Himalayas: 2500 km, six countries, Eight Thousanders, Water Tower of Asia; India-Eurasia collision 50 mn yrs ago; Himadri, Himachal, Shivalik. Ladakh: cold desert.
- Gangetic Plains: fertile, flat, populous. Thar: dunes, taanka. Aravallis: 2.5 bn yrs, Mount Abu, Zavar zinc, forts.
- Peninsular Plateau: triangle; Western Ghats (tall, UNESCO, Sahyadri), Eastern Ghats (low, broken); Deccan; rivers east (Godavari, Krishna, Kaveri, Mahanadi), west (Narmada, Tapi); tribes.
- Coasts 7500 km: west narrow, estuaries; east wide, deltas, Chilika, Pulicat. Lakshadweep (36 coral), Andaman and Nicobar (500+ volcanic, Barren Island). Sundarbans; Khasi hills, Mawlynnong.